

SM-A266M/DS BT/WIFI Ant Specification

Sub Ant E/F

- Antenna Type : Metal Insert
- Antenna Manufacturer : Samsung

Gain value is measured by Samsung.

Gain Value is measured in active call & Antenna selection.

Antenna gain is measured in A+ Chamber.

* A+ Chamber

Anechoic chamber is available for Over the Air Test per CTIA, LTE and WiFi Test. Also it is available for antenna pattern measurement for design and development. It's important to RF shielding, absorbing material, absorber layout, precision mechanical alignment and positioner accuracy, when anechoic chamber is designed and installed. A+ can provide the design and construction of anechoic chamber for customer requirements. A+ has a series of positioners, microwave transmit and receive instruments and measurement data acquisition and analysis software. We have the experience to offer anechoic chamber of any size; from the smallest unit for simple RF test to the largest and most complex custom-build for a research and development laboratory.

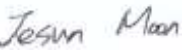
*Test Equipment list

Description	Manufacturer	Model	S/N	Cal Due
Network Analyzer	Agilent	E5071C	MY46111997	2025.07.15

Test dates

- 2024.12.18

Names of test personnel

- Jesun MOON
- Signature : 

Test Lab address

- 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea

- Return Loss & VSWR Test

The VSWR measurement of antennas assembled into a fully operating SM-A266M/DS phone handset is measured on the Network Analyzer. The handset is set up with a 50 Ohm coaxial cable connected to the 50 Ohm point. Calibration is done at the end of the 50 Ohm coaxial cable connection. The other end of the 50 Ohm coaxial cable is connected to a network analyzer. The handset is positioned on a non-conductive table for free space measurements.



- Return Loss & VSWR Test

Samsung has a system that can measure VSWR using A+ chamber and E5071C network analyzer for passive measurement. In order to measure the VSWR of each antenna, the lab connects the coaxial cable to the point in contact with the antenna on the main board. The VSWR is measured through the coaxial cable connected in the set. At this time, SM-A266M/DS is assembled in the same state as the user environment

- Test Method (Manufacturing)

All measurements are done with SM-A266M/DS fully assembled. Measure in consideration of the Customer's usage environment. Use a fully shielded chamber environment to prevent any noise-induced errors. Typically. The electrical properties of antenna are measured using a jig that can hold the set.

SM-A266M/DS

RF Antenna Gain

Antenna E (Sub3)

- Metal Insert
- Manufacturer : Samsung.

Antenna D	Band	WiFi 5GHz
	Avg. gain (dBi)	-8.2
	Peak gain (dBi)	-4.6

Antenna F (Sub4)

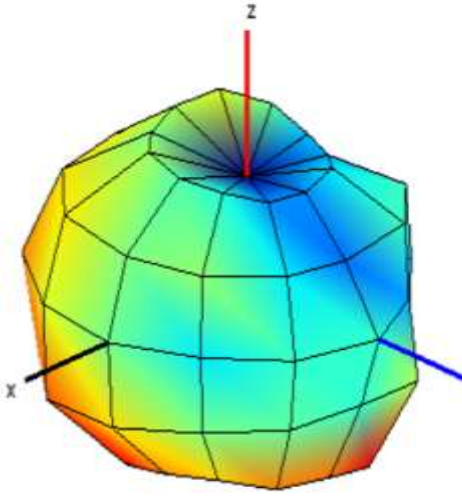
- Metal Insert
- Manufacturer : Samsung.

Antenna E	Band	WiFi 2.4GHz
	Ave. gain (dBi)	-6.9
	Peak gain (dBi)	-3.3

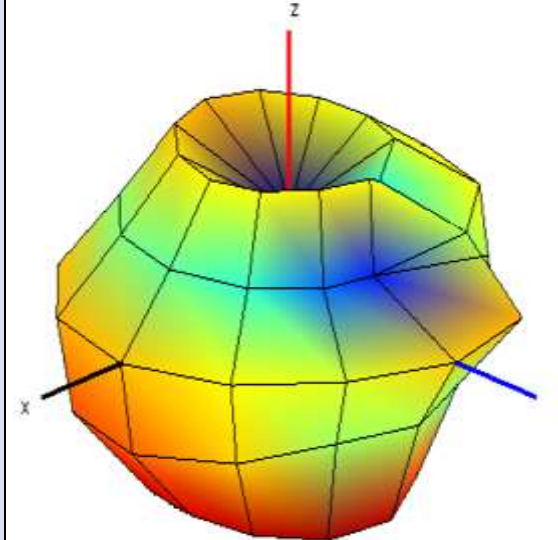
● Radiation Pattern

There is Radiation Pattern due to passive measurement with A+ chamber.

Antenna E (Sub3)

주파수 대역 (Frequency Band)	Sub 3 WiFi 5GHz
3D Radiation Pattern	
Efficiency[%]	15.1
Avg Gain [dBi]	-8.2
Peak Gain [dBi]	-4.6

Antenna F (Sub4)

주파수 대역 (Frequency Band)	Sub4 WiFi 2.4GHz	
3D Radiation Pattern		
Efficiency[%]	20.3	
Avg Gain [dBi]	-6.9	
Peak Gain [dBi]	-3.3	